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Copyright (c) 1993 - 2000 Compugen Ltd
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DNA encoding novel
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Nucleotide sequenc
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## ALIGNMENTS

AAX86754 RESULT

AAX86754 standard; cDNA; 2065

ВP

AAX86754;

CDS Modulator protein; BRCA1; tumour suppressor protein; breast cancer; ovarian cancer; cell growth; cell proliferation; ds. WPI; 1999-517952/43. cDNA 091-21A31 encoding a BRCA1 modulator protein. 27-OCT-1999 (first entry) Lingenfelter C, Polakis PG, 13-AUG-1997; 13-AUG-1997; 07-SEP-1999. US5948643-A. Homo sapiens (ONYX-) ONYX PHARM INC. 97US-0968751 97US-0968751 /\*tag= Location/Qualifiers 103..1512 ۵ Rubinfeld В, Vuong TT;

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KSHV long unique c Human cancer agent Human SNP oligonuc

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Query Match 94.2%;
Best Local Similarity 98.9%;
Matches 1946; Conservative
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                                                                                                            GCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTCCAGAGCCAGCTCCCTGAGGTGG
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TTCCTGCCCTCACCCTGCCCCACTCCTACGACTGGGAGCTGACATGACCAG
TCGGGACCAGCCTGAGGTGTAAGGGCAGACAACAGGTGAGGGTGAGTG 
TGCCTGCAACTTGTAGGTCAAGGACTGTCCAGGCAGGGTTTGTGGACAGAGCCC 
CCAAGCTGGACACCTTCCTGTGGTCGTGAGAACAGTGAGTCTGACCAATGGCCAGACACACA 
agcccaagaccaaggttaagcagagggtgagggtgaagacagtgccttct
tccagcctactgacacagtca
CCGGACAAAATTCATCCAGCCTACTGACACAGTCATGA
CCTCTTGCAGCAAAGATGTGGTAAGGACAGGCTTCGATGG                           ctcttgcagcaaagatgtggtaaggacaggcttcgatgg
gtggccagagct rccGGAATGCCA
TCTCACTGGGTGGCCAGAGCTGTGCAGGAGAGCCAGATG
ACTCCCCAATTCAGGATGTCCCCCAAGAAGAT. 
ggccatccttccgtgatgata
TGAAGCTCCGCCGGCCATCCTTCCGTGATGATATTGATC
CACCAGTGGCCAGTGAGACTGTCGACCGCCTGGTTTTAGAGAGCCCAGCCCCTG
tgaaaaagaagctaacgatgc
AGCCTGAAAAAGAAGCTAACGATGCTGCAGGAAACC
AGTTAGAACTGAAGTCAGCCC
\GGATTTGTTTTCCTCCAGAA
TCTCTCAAGAAAGAGTACGAGAATCTAAAAGAGGCACGGAAGGCCTCAGGGGAGG 

Similarity

94

DB

19;

Length

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RESULT ANY PARAMETER AND PARAMETER ANY PARAM
                                   cc a 53 kba BRCA1 modulator protein (see AAW37881) that binds to the ct tumour suppressor gene product BRCA1, and which is characterised by cc a zinc finger domain and a leucine zipper motif. 3 cDNA clones cc (see also ANV29063 and ANV29064) coding for BRCA1 modulator proteins cc (see AAW37881-83) were isolated from a HeLa cDNA library using a cc yeast two-hybrid assay with a GAL4-BRCA1(8-1293) fusion as bait. cc Vectors and host cells comprising the isolated nucleic acid sequences are claimed, as well as a process for producing BRCA1 cc modulator protein by culturing these host cells. BRCA1 modulator cc proteins and nucleic acids can be used to diagnose diseases compounds that alter BRCA1 interaction with BRCA1 modulators for the treatment of such diseases.
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DNA encoding novel signal transduction pathway protein, Seq ij 1379.

antiinflammatory; anti-HIV; antibacterial; antiinflammatory; cancer; immune system disorder; rheumatoid arthritis; inflammatory condition; organ transplant rejection; infection; hepatitis C; blood disorder; sickle cell anaemia; hyperproliferative disorder; Gaucher's disease; neurodegenerative disorder; Alzheimer's disease; Parkinson's disease; chromosomal abnormality; Down syndrome; ischaemia; renal disorder; cardiovascular; respiratory; wound healing; endocrine; Addison's disease; reproductive system; gastrointestinal; liver disorder; AIDS; ds; Neuroprotective; cytostatic; antiinflammatory; anti-HIV; acquired immune deficiency syndrome. dermatological; immunosuppressive; tume tiinflammatory; cancer; Addison's disease; AIDS; ds; tumour;

Homo

18-APR-2000
19-AVY 2000
07-JUN-2000
30-JUN-2000
30-JUN-2000
30-JUN-2000
11-JUL-2000
11-JUL-2000
11-JUL-2000
11-AUG-2000
11-AUG 31-JAN-2000; 04-FEB-2000; 24-FEB-2000; 02-MAR-2000; 16-MAR-2000; 17-MAR-2000; 17-JAN-2001; 2000US-0180628
2000US-0180528
2000US-01805467
2000US-0199123
2000US-0199123
2000US-020467
2000US-0214886
2000US-0214886
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2000US-0214889
2000US-0214890
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2000US-0214518
2000US-0214518
2000US-0224518
2000US-0225213
2000US-0225261
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2000US-02311414 2001WO-US01312 2000US-0179065

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RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                                           cc polyuclectides (II), (I), (II) and the antibody to (I) are useful for diagnosing, preventing and treating diseases including immune system cc disorders (e.g. congenital and acquired immunodeficiencies, autoimmune cc disorders (e.g. rheumatoid arthritis), inflammatory conditions, organ cc transplant rejections and graft versus host disease, infectious diseases (e.g. hepatitis C), bleeding disorders, haemoglobin abnormalities and cother blood-related disorders (sickle cell anaemia), myeloproliferative cc disorders, primary haematopoietic disorders, hyperproliferative cd disorders (e.g. Gaucher's disease and cancer), neurodegenerative cd disorders (e.g. Alzheimer's disease, Parkinson's disease), chromosomal cc disorders (e.g. glomerulonephritis), cardiovascular disorders (e.g. arrhythmia), respiratory disorders, dermatological disorders (e.g. Addison's disease), reproductive system disorders, gastrointestinal cc disorder (inflammatory disorders), liver disorders, gastrointestinal cc disorder (inflammatory disorders), liver disorders, activators of cumour proliferation in pathologies e.g. acquired immune deficiency cryotome (AIDS), AAAS27876 represent movel signal transdiction.
                                                                                                                                                                                                                                                                                                                      Query Match 7.4%;
Best Local Similarity 100.0%;
Matches 148; Conservative
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05-DEC-2000;
05-DEC-2000;
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06-DEC-2000;
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01-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel polypeptides useful for diagnosing, treating, preventing and/or prognosing disorders related to the proteins, including cancers, immune disorders and neuronal disorders -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ( HUMA - )
                AAA30290;
                                              AAA30290 standard; DNA; 3489
                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                    syndrome
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                                                                                                                                                                                                         TATCCGTGCTCTGTGCACTATCTGCTCCGACTTCTTCGATCACTCCCGCGACGTGGCCGC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; SEQ ID No 1379; 880pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                   protein coding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HUMAN GENOME
                                                                                                                                                                                                                                                                                                                                                                                       148
                                                                                                                                                                                                                                                                                                                                                                                                                   roliferation in pathologies e.g. acquired immune deficiency (AIDS). AAS26976-AAS27850 represent novel signal transduction protein coding sequences and PCR primers of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Barash SC,
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2000US-0251988.
2000US-0256719.
2000US-0256719.
2000US-0251868.
2000US-0251869.
2000US-0251869.
2000US-0251989.
2000US-0251999.
2000US-0254097.
2001US-0259678.
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                                                                                                                                                                                                                                                                                                                      Score 148; DB 22; Pred. No. 3e-30; 0; Mismatches
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2000US-0231968.
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2000US-02332401.
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2000US-0246611.
2000US-0246528.
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2000US-0246611.
2000US-024677.
200US-024677.
2000US-024677.
2000US-024677.
2000US-024677.
2000US-02

14-SEP-2000;
14-SEP-2000;
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21-SEP-2000;
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Ouery Match
Best Local Similarity 48.9
Conservative
                                                                                                             efficient persistence of rhadino virus DNA in mammalian cells. Persistent rhadino virus infection is implicated in a variety of diseases e.g. Kaposi's Sarcoma (KS), Primary Effusion Lymphoma (PEL) and multicentric Castleman's disease. In addition, KS is a common malignancy in HIV patients. KSHV persists in host cells in a latent form. One of the few genes expressed from the latent viral DNA is LANA. LANA associates with both human chromosomes and with the rhadino virus cis-acting element (RVCAE), thereby providing a tethering function: the KSHV DNA episome is "lied" to the host chromosomes. This allows the viral DNA to persist in the host cell. The present sequence may be used to screen and identify molecules that inhibit LANA interaction with RVCAE, thereby interfering with the latency cycle of this virus. Potential antiviral treatments for the above mentioned diseases may therefore be based on LANA deregulation.
                                                                                    Sequence 3489
                                                                                                                                                                                                                                                                                                          gamma-2 herpes virus class. The LANA protein is necessary for the
                                                                                                                                                                                                                                                                                                                        The present sequence is the Kaposi's sarcoma-associated herpesvirus, (KSHV) latency-associated nuclear antigen (LANA) gene. KSHV is also as Human Herpes Virus 8 (HHY8) and belongs to the rhadino virus, or
                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Fig 6;
                                                                                                                                                                                                                                                                                                                                                                                                                 Effusion Lymphoma
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           P-PSDB;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (KIEF/) KIEFF E D.
(BALL/) BALLESTAS
(KAYE/) KAYE K M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19-NOV-1998;
21-APR-1999;
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                                                                                    BP;
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99US-0298568
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/note= "nuclear localisation signal,
190..210
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                                                                                    1053 A; 862 C;
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                          2.6%;
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          ; Score 52; DB;
; Pred. No. 0.00;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                             sease associated with rhodino virus includes Kaposi's Sarcoma and Prim
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                                                                                    1137 G; 437
          DB 21; I
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les 145;
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                                    Length 3489
            Indels
                                                                                    other;
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            0;
         Gaps
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            0;
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505 CTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAAGAG 564

sequence represents the nucleotide

the Kaposi's

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RESULT
AAF82901
tethering protein is LANA. The composition is useful in aiding the retention of the viral DNA in the host cell. The viral vector encodes a protein suitable for tethering DNA to Histone H1. Methods for screening for compounds which are agonistic or antagonistic for the tethering of viral proteins to histone H1 and DNA binding sites are useful for developing the method of viral transfer. The composition has applications to gene therapy, including the treatment of multiple sclerosis, Parkinson's disease, Huntington disease and diabetes. The present
                                                                                                                                                                                           The invention provides a composition comprising nucleic acid, histone H. protein and expression vector operationally encoding a protein suitable for tethering the nucleic acid to the histone HI protein, where the tethering protein is LANA. The composition is useful in aiding the
                                                                                                                                                                                                                                                                                                                                                                                                                       A composition for use in that includes a nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Key
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                                                                                                                                                                                                                                                                                                                                          Disclosure;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Robertson ES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (UNMI ) UNIV MICHIGAN
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RESULT 6
AAV73805/c
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XX AAV738
XX AAV738
XX Exposi
KW Kaposi
KW Giagno
KW Y-adh;
XX Kaposi
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PT Gi:hyd
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Best Local
                                                                                                                                                                                                                                                                                       Kaposi's sarcoma; acquired immune deficiency syndrome; AIDS; DHFR; B dihydrofolate reductase; LUR; long unique region; vaccine; prophylax diagnosis; treatment; HHV8; capsid protein IV; tegument protein IV; glycoprotein; kaposin; cyclin D; immediate early protein; IEP; OX-2; v-adh; G-protein coupled receptor; FGARAT; ds.
This sequence is a fragment of the Kaposi's sarcoma-associated herpesvirus (KSHV) LUR (long unique region). This fragment contains coding regions for ORF65 which encodes capsid protein IV, ORF66, ORI which encodes tegument protein IV, ORF68 which encodes a glycoprote:
                                                                                  Kaposi's sarcoma-associated herpes virus di:hydro:folate reductase and is useful f
                                                                                                                                                                                                                                                                                                                                                                                                                     AAV73805 standard; DNA; 32207
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             associated herpesvirus (human herpesvirus 8) latency-associated nuclear antigen (LANA), which acts as a tethering protein.
                                                      Disclosure;
                                                                                                                   WPI; 1999-069741/06
                                                                                                                                                             (UYCO ) UNIV
                                                                                                                                                                                  29-NOV-1996;
                                                                                                                                                                                                       29-NOV-1996;
                                                                                                                                                                                                                            15-DEC-1998
                                                                                                                                                                                                                                                 US5849564-A
                                                                                                                                                                                                                                                                   Kaposi's sarcoma-associated herpesvirus.
                                                                                                                                                                                                                                                                                                                                                      KSHV LUR DNA
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                                                                                                                                                                                                                                                                                                                                                                                                AAV73805;
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                                                                                                                                        RA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3489 BP;
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                                                      Column 155-182;
                                                                          of
                                                                                                                                                             COLUMBIA NEW YORK
                                                                                                                                                                                                                                                                                                                                                      (nucleotides 105,301-137,507).
                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                      Chang Y,
                                                                                                                                                                                  96us-0770379
                                                                                                                                                                                                       96US-0770379
                                                                          Kaposi's sarcoma
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48.9%;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                     ВP
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                                                     English.
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 glycoprotein,
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             ORF 67
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Best Local
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            CDS
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19785 CAGGATGAGCAGCAGCAGCAGGATGAGCAGCAGCAGGAGGAGCAGCAGGAG
                                                                                                                                                                                                                                         ORF69, K12 which encodes kaposin, K13, ORF72 which encodes cyclin D, ORF73 which encodes immediate early protein (IEP), K14 which encodes OX-2 (v-adh), ORF74 which encodes G-protein coupled receptor, ORF75 which encodes tegument protein/FGRARAY, K15, KSHV is a new human Herpesvirus (HHV8) believed to cause Kaposi's sarcoma (KS) which is the most common form of neoplasm occurring in persons with acquired immune deficiency syndrome (AIDS). The DHFR protein is useful for vaccination, prophylaxis, diagnosis and treatment of a subject with Kaposi's sarcoma and for detecting expression of a DNA virus associated with Kaposi's
                                                                                                                                                                                                                            sarcoma in a cell
                                      505 CTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAAGAG
                                                                                                   Similarity
                                                                                Conservative
                                                                                                                                                                                    BP;
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Pred.
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                                                                                Mismatches
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No.
                                                                                                                                                                                    8713
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                                                                                                   DB 20;
                                                                                                                                                                                    7109
                                                                                145;
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                                                                                                                    Length
                                                                              Indels
                                                                                                                                                                                    0 other;
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                                                                              Gaps
                                        564
19726
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JLT 7
19941/c
AAV19941 standard; DNA; 137507 BP.
AAV19941;
03-AUG-1998 (first entry)
KSHV long unique coding region and terminal repeat.
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KSHV; HHV8; human herpes virus 8; macrophage inflammatory protein II; interleukin-6; II-6; interferon regulatory factor; rheumatoid arthritis; complement-binding protein; glycoprotein; capsid protein IV; infection; immediate early protein; Kaposi's sarcoma; protective vaccine; lymphoma; lymphoproliferative disease; leukaemia; splenomegaly; mycosis fungoides; HIV immune status; anti-inflammatory agent; therapy; ds.

Kaposi's sarcoma-associated herpes virus.

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Key

Location/Qualifiers

(DS 1142..2794

/*tag= a
/product= complement-binding protein

CDS 8699..11236

/*tag= b
/product= glycoprotein B
complement (17261..17875)
/*tag= c
/product= interleukin 6
complement (21548..21832)
/*tag= d
/product= macrophage inflammatory protein II

CDS complement (27137..27424)
/*tag= e
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29-NOV-1996
25-JUL-1996
25-JUL-1996
25-JUL-1996
25-JUL-1996
25-JUL-1996
10-SEP-1996
11-NOV-1996
13-NOV-1996
          This sequence represents the long unique region and terminal repeat of the Kaposi's sarcoma-associated herpes virus (KSHY). KSHY is also known as human herpes virus 8 (HYV8). This sequence contains the DNAs of the invention which encode KSHY polypeptides selected from: (a) viral macrophage inflammatory protein (MIP) II; (b) viral interleukin-6 (IL-6); (c) viral IRP 1; (d) complement-binding protein; glycoproteins B, M or I; (d) capsid protein IV encoded by ORF65; and (e) immediate early protein encoded by ORF73. Labelled probes for the nucleic acid, proteins encoded by It, and antibodies (Ab) specific for the proteins are useful for detecting HHV8, specifically for diagnosis of Kaposi's sarcoma, in body fluids or tissue samples. HHV8 infections can be treated with antisense or triplex forming molecules or agents that bind specifically to the protein. Ab may be used for prophylaxis or treatment of HHV8 infection, while the protein can be used in protective vaccines. Ab may also be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDS
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                                                                                                                                                                                                    Example
                                                                                                                                                                                                                            preparation
                                                                                                                                                                                                                                                     New nucleic acid encoding Kaposi's sarcoma
                                                                                                                                                                                                                                                                               WPI;
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 differentiate
                                                                                                                                                                                                                                                                               1998-130615/12.
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                                                                                                                                                                                                                    useful for, e.g. detecting levels of HHV8 in, and n of vaccines for treatment of, HIV patients
                                                                                                                                                                                                   Page 135-203; 230pp; English.
                                                                                                                                                                                                                                                                                                                              COLUMBIA NEW YORK.
                                                                                                                                                                                                                                                                                                  Chang
                                                                                                                                                                                                                                                                                                                                                    96US-0686350.
96US-0687253.
96US-0688814.
96US-0708678.
96US-0708678.
96US-0747887.
96US-0747887.
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96US-0686243.
96US-0686349.
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89600..905
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /product= interferon regulatory complement (111931..112443)
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complement (93636. 94127)
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complement (88410..88910)
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lymphomas,
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t (58976..60175)
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lnes. Ab may al
be implicated
             also be used
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RESULT
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                                                                                                                                                                                                                                                                                                                        numan; cancer cell marker; TAXOL; cytostatic; tumour; carc
squamous cell carcinoma; sarcoma; fibrosarcoma; leukaemia;
lymbhocutic leukaemia;
                                                                                                                                                         14-APR-2000; 2000US-197538P
                                                                                                                                                                                      13-APR-2001;
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                                                                                                                                                                                                                                             WO200179556-A2
                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                   lymphocytic leukaemia; lymphoma; plasmocytoma; Hodgkin's disease; glioma; ss.
                                                                                                                                                                                                                                                                                                                                                                            Human
                                                                                                                                                                                                                                                                                                                                                                                                       29-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                   AAS60947;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAS60947 standard; cDNA; 4246 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 137507 BP;
                                                                                                                             (MILL-) MILLENNIUM PREDICTIVE
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                                                                                                                                                                                                                                                                                                                                                                            cancer
                                                                                                 J,
                                                                                                 Brown
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                                                                                                                                                                                                                                                                                                                                                                           agent-resistance marker
                                                                                                                                                                                      2001WO-US12132
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                                                                                                                                                                                                                                                                                                                     reticulum cell sarcoma;
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                                                                                                                                                                                                                                                                                                                                                carcinoma;
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Novel using

nucleic acid, used as TAXOL to treat cancer

cell grow

rker to

determine the effectiveness in individuals -

Claim 1; Page 450-451; 527pp; English

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RESULT 9
AAL30971/c
ID AAL309
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cells are shown not to express one of the 804 resistance markers. The methods can be used to determine the effectiveness of TAXOL in the treatment of cancer cell growth in an individual. The markers can be used as targets in developing anti-cancer agents such as chemotherapeutic compounds. The markers can also be used as targets
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              genomic sequences corresponding to the markers, in the identificaticells or tissues which mis-express the protein. Cancers which may be targeted include carcinoma (e.g. squamous cell carcinoma), sarcoma (e.g. fibrosarcoma) leukaemia (e.g. lymphocytic leukaemia), lymphoma, plasmocytoma, reticulum cell sarcoma, Hodgkin's disease a tumours (e.g. glioma). The present sequence is one of the 1046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to 1046 novel nucleic acids which are used as markers for determining the sensitivity of a cancer cell to the anticancer agent TAXOL. Cancer cells can be treated with TAXOL when they are shown to express one of the 242 sensitivity markers or the
                                 complement related protein; cytochrome; kinesin; cytok;
interleukin; G-protein coupled receptor; thioesterase;
multifactorial disease; autoimmune disease; infection;
                                                                                       neuroprotective; antimicrobial; gene therapy; vaccine; amylase; can amyloid protein; angiopoietin; apoptosis related protein; cadherin; cyclin; polymerase; oncogene; histone; kinase; colony stimulating f
                                                                                                                                                                                                                                                                                                       AAL30971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 4246 BP;
                                                                                                                                                                                      Human SNP oligonucleotide #4179
                                                                                                                                                                                                                              24-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  novel cancer cell markers.
                                                                                                                                                Immunosuppressive; immunostimulatory; antiinflammatory; cytostatic;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ggaggagaaggcactggcgtatgacaaactggagaagaccaagaaccgcctgcagcagga
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                                                                                                                                                                                                                                                                                                       standard;
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                                                                       cytokine;
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                                                     inflammation;
                                                                       interferon;
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                                                                                                                              cancer;
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                                                                                         factor;
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RESULT :
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI;
                                                                                           Human; nootropic; immunosuppressant; cytostatic; gene therapy; cance peripheral nervous system; neuropathy; central nervous system; CNS; Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic; amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic;
                                                                                                                                                                                                                                                                                                                                                  1885
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                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to oligonucleotides encoding polymorphic variants of proteins related to amylases, amyloid proteins, angiopoiet apoptosis related proteins, cadherin, cyclin, polymerase, oncogenes, histones, kinases, colony stimulating factors, complement related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-DEC-1999;
27-DEC-2000;
                                        Homo sapiens.
                                                                                                                                                                  Human
                                                                                                                                                                                             22-OCT-2001
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                                                                                                                                                                                                                                                   AAI58369 standard;
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                                                                               chemokinetic;
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                                                                    leukaemia;
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                                                                                                                                                                  polynucleotide SEQ
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                                                                                                                                                                                                                                                                                                                                                                              Conservative
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                                                                                 thrombolytic;
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Pred. No. 0.0
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                                                                                 arthritis; inflammation;
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Best Local
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25-APR-2000;
09-JUL-2000;
19-JUL-2000;
                                                                                                                                                                                     4104
                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to human nucleic acids (AAI57798-AAI61369) and the encoded polypeptides (AAM38642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polypnucleotides are useful in gene therapy. A composition containing a polypeptide or polynucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral neuropathy and localised neuropathies and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activity. Parager Syndrome. Other uses include the Activinjinhibin activity, chemotactic/chemokinetic activity, haemostatic and thrombolytic activity, cancer diagnosis and therapy, drug screening, assays for receptor activity, arthritis and inflammation, leukaemias and
                                                                               4224
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                            4284
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19-OCT-2000;
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CATGGA 602
                                                                                                                               aagtctggaagaagccaagaagaagcttctgaaggacgcggaggccctgagccagcgcct
                                                                                                                                                                                    cctgcagtcccagttggctgataccaagaagaaagtagatgacgacctgggaacaattga
                                                                                                                                                                                                                                                               TCTTGCCCCAGGAGGAGGAGTGTCTTGGATCGAGAATTCTTAAAGAATGAACTGGACAA 356
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DB; AAM39213.
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                         gctggacgacctcacggtggacctggaccaccagcgccaggtcgcctccaacttggagaa
                                                  GCAGGATGAGACCAAACAAGCACAAGAGGAGGCGGGCCGGCTCAGGAGCAAGATGAAGAC 596
                                                                            ggaggagaaggcactggcgtatgacaaactggagaagaccaagaaccgcctgcagcagga
                                                                                                       GGGCAAGGCCGAGATGCTGCTCCACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCA
                                                                                                                                                                                                              TGTCAGAGCCCAGCTTTCCCAGAAAGACAAGGAGAAACGAGACAGCCAGGTCATCATCGA 416
                                                                                                                                                                                                                                      tcaggagcagcaggaggaggaggaggccaggaagaacctggagaagcaagtgctggc 4103
                                                                                                                                                                                                                                                                                            145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    nucleic acids and polypeptides, useful as central nervous system injuries -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1; SEQ ID NO 572; 10078pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                The sequence data for this patent did not
                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Wang Z,
Zhou P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HYSEQ
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2000US-0552317.
2000US-0598042.
2000US-0620312.
2000US-063450.
2000US-0662191.
2000US-0693036.
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Wehrman T,
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Xu C, Xue AJ,
Drmanac RT;
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No. 0
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Query Match Best Local Similarity

2.48;

Score Pred.

48.4; DB No. 0.023;

Length 7501;

Sequence 7501

BP;

2268 A;

1668

C; 1994

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AAI58370
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14-SEP-2000;
19-OCT-2000;
29-NOV-2000;
                                   The invention relates to human nucleic acids (AAI57798-AAI61369) and the encoded polypeptides (AAM38642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polynucleotides are useful in gene therapy. A composition containing a polypeptide or polynucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral neuropathy and localised neuropathies and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activity, Drager Syndrome. Other uses include the utilisation of the activity, chemotactic/chemokinetic activity, hammostatic and thrombolytic activity, cancer diagnosis and therapy, drug screening, assays for receptor activity, arthritis and inflammation, leukaemias and
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Wang
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                                                                                                                                                                                                                                                                                                                                                Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                           Novel nucleic acids and such as central nervous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-JAN-2000; 2000US-0488725
25-APR-2000; 2000US-0552317
09-JUL-2000; 2000US-0598042
19-JUL-2000; 2000US-0620312
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                      C.N.S disorders
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DB; AAM39214.
The sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Wang Z,
                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 573; 10078pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000US-0620312.
2000US-0653450.
2000US-0662191.
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2000US-0727344.
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Wehrman T,
  data
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  for
                                                                                                                                                                                                                                                                                                                                                                                        polypeptides, useful
system injuries -
  this
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  part
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  of
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14-SEP-2000;
19-OCT-2000;
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25-APR-2000;
09-JUL-2000;
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                                                                            Tang
                                                                                                                                                                                                                                                                               peripheral nervous system; neuropathy; central nervous system; Calzheimer's; Parkinson's disease; Huntington's disease; haemosta amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic;
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                 Novel
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                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                        chemokinetic; thrombolytic;
                                                                                                                                                                                                                                                                                                                             Human
                                                                                                                                                                                                                                                                                                                                             22-OCT-2001
                                                                                                                                                                                                                                                                                                                                                              AAI60155;
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                                                                                             (HYSE-)
                                                                                                                                                                                                                                                                leukaemia;
                                                                                                                                                  19-JUL-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTTGCCCAGGAGGAGGAGAATGTCTTGGATCGAGAATTCTTAAAGAATGAACTGGACAA
                                 2001-442253/47
DB; AAM40999.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           gctggacgacctcacggtggacctggaccaccagcgccaggtcgcctccaacttggagaa
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              <u> gaaggagaaggcactggcgtatgacaaactggagaagacccaagaaccgcctgcagcagga</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      145;
         nucleic acids and polypeptides, useful as central nervous system injuries -
                                                                                                                                                                                                                                                                                                                            polynucleotide
                                                                                                                                                                                                                                                                                                          nootropic;
                                                                                             HYSEQ INC
                                                            Liu (
Wang 2
Zhou
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                                                                                                              2000US-0488725.
2000US-0552317.
2000US-0598042.
2000US-0620312.
2000US-0631450.
2000US-06631450.
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2000US-0693036.
2000US-0727344.
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u P,
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                                                         Asundi V, Che
Wehrman T, Xu
                                                                                                                                                                                                                                                                                                        immunosuppressant; cytostatic; gene therapy; cancer;
                                                                                                                                                                                                                                                                                                                                                                               cDNA;
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AJ,
RT;
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                 disorders
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26-JUL-2001
                 WO200153312-A1
                                                                                                             Human polynucleotide SEQ ID NO 4145.
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                                                   leukaemia;
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The invention relates to human nucleic acids (AAI57798-AAI61369) and the encoded polypeptides (AAM38642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polynucleotides are useful in gene therapy. A composition containing a polypeptide or polynucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral neuropathy and localised neuropathies and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activity such as: Immune system suppression, activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic and thrombolytic activity, cancer diagnosis and therapy, drug screening, assays for recents activity and inflammation.
Sequence 7741 BP; 2303 A; 1751 C; 2080 G;
                                                                     specification.
                                                                                                     N.S disorders.
The sequence data
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                                                                                                                                                                       for receptor activity, arthritis
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                                                                                                     for this
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                                                                                                                                                                       and inflammation,
   1606
                                                                                                  not form part of
T; 1
other
                                                                                                                                                                          leukaemias
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Length

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Matches 145;
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4495 gaagca
                                        CATGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTTGCCCAGGAGGAGGAGAATGTCTTGGATCGAGAATTCTTAAAGAATGAACTGGACAA 356
                                                                             gctggacgacctcacggtggacctggaccaccagcgccaggtcgcctccaacttggagaa
                                                                                                 CACTCTGCGGGATACGCTGGAAGAACGCAATGCTACTGTGGTATCTCTGCAGCAGGCCTT
                                                                                                                                                                                                                                                                                                                                     TGTCAGAGCCCAGCTTTCCCAGAAAGACAAGGAGAAACGAGACAGCCAGGTCATCGA 416
                                                                                                                                                                                                                                                                                                                                                                                            tcaggagcagcaggaggaggaggaggccaggaagaacctggagaagcaagtgctggc 4254
                                                                                                                                                          ggaggagaaggcactggcgtatgacaaactggagaagaccaagaaccgcctgcagcagga
                                                                                                                                                                                                 GGGCAAGGCCGAGATGCTGTGCTCCACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCA
                                                                                                                                                                                                                                    aagtctggaagaagccaagaagcttctgaaggacgcggaggccctgagccagcgcct
                                                                                                                                                                                                                                                                                                                 cctgcagtcccagttggctgataccaagaagaaagtagatgacgacctgggaacaattga
    4500
                                          602
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standard; cDNA;

7741

(first entry)

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Best Local Similarity
Matches 145; Conserv
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25-APR-2000;
09-JUL-2000;
19-JUL-2000;
03-AUG-2000;
14-SEP-2000;
19-OCT-2000;
29-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to human nucleic acids (AAI57798-AAI61369) and the encoded polypeptides (AAM38642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polynucleotides are useful in gene therapy. A composition containing a polypeptide or polynucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral neuropathy and localised neuropathies and central nervous system disease, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral scierosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activity. Drager Syndrome. Other uses include the utilisation of the activity, chemotactic/chemokinetic activity, hamostatic and thrombolytic activity, cancer diagnosis and therapy, drug screening, assays for receptor activity, arthritis and inflammation, leukaemias and
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                                                                                                                       4375
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                                                                                                                                                                                                                                            4255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Note: The sequence data for this patent did not form part of the printed specification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tang
                                                                                                                                                                                                                                                                                                   4195 tcaggagcagcaggaggaggaggaggaggccaggaagaacctggagaagcaagtgctggc
                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 7741 BP;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel nucleic acids and polypeptides, useful such as central nervous system injuries -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-442253/47.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (HYSE-)
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                                                                                         537
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gaagca
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                                                                                                                                                                                                                                         cctgcagtcccagttggctgataccaagaagaaagtagatgacgacctgggaacaattga
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                                                         gctggacgacctcacggtggacctggaccaccagcgccaggtcgcctccaacttggagaa 4494
                                                                                      GCAGGATGAGACCAAACAAGCACAAGAGGAGGCGGGCCGGCTCAGGAGCAAGATGAAGAC
                                                                                                                   ggaggagaaggcactggcgtatgacaaactggagaagaccaagaaccgcctgcagcagga
                                                                                                                                                                             aagtctggaagaagccaagaagcttctgaaggacgcggaggccctgagccagcgcct
                                                                                                                                                                                                          CACTCTGCGGGATACGCTGGAAGAACGCAATGCTACTGTGGTATCTCTGCAGCAGGCCTT
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Wang Z,
Zhou P,
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2000US-0552317.

2000US-0598042.

2000US-0620312.

2000US-0653450.

2000US-0652191.

2000US-0693036.

2000US-0727344.
                                                                                                                                                                                                                                                                                                                                                                Conservative
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Wehrman T,
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Xu C, Xue AJ,
R, Drmanac RT;
                                                                                                                                                                                                                                                                                                                                                                Mismatches
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Yang Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      for treating disorders
                                                                                                                                                                                                                                                                                                                                                                                         Length 7741;
                                                                                                                                                                                                                                                                                                                                                                                                                                        1 other;
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Zhang
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482 AGGCCGAGATGCTGTGCTCCACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGCAGC 541 500 agctggagaggagcttgtccgaactcaaaaccagatgggtaagatggggctgctacaag

Matches

Local

Similarity

2.4%;

Score 47.8; D Pred. No. 0.02 0; Mismatches

DB 23; ).027; nes 152;

Length

5154; ω ••

Gaps

Conservative

0

Sequence

5154

B₽;

1544 A; 1236

C; 1478

G;

896 Τ, 0

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cc polynucleotides are also used in diagnostics as expressed sequence tags (I) is useful in gene therapy techniques (II). (II) is useful in gene therapy techniques (II). (II) is useful for generating antibodies against it, detecting or cquantitating a polypeptide in tissue, as molecular weight markers and as cdiarging of sites expressing (II). (I) and (II) are useful in medical cdiarging of sites expressing (II). (I) and (II) are useful in medical cdiargers involving aberrant protein expression or biological activity. (C The polypeptide and polynucleotide sequences have applications in cdiagnostics, forensics, gene mapping, identification of mutations cresponsible for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and cdiagnostic coding sequences. AAS64197-AAS94564 represent novel human cdiagnostic coding sequences of the invention. CC Note: The sequence data for this patent did not appear in the printed consideration, but was obtained in electronic format directly from WIPO at figure 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 14
AAS84859
                                                                                                                                                                                                                                                                                                                                                  The invention relates to isolated polynucleotide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PCR) primers, oligomers, and for chromo and gene mapping, and in recombinant production of (II). The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New isolated polynucleotide and encoded polypeptides, useful diagnostics, forensics, gene mapping, identification of mutat responsible for genetic disorders or other traits and to asse
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    biodiversity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             P-PSDB; ABG20672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Drmanac RT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-MAR-2000; 2000US-0540217
23-AUG-2000; 2000US-0649167
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2001-639362/73.
                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID No 20663; 103pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Liu C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
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RESULT 1
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                     A process has been developed for the production of a DNA fragment encoding silk protein. The process involves: (a) selecting target DNA, from a silk-producing spider, that contains many repetitive and non-repetitive regions; (b) selecting a single-stranded DNA primer of at least 10 nucleotides with a sequence that is complementary to a region of the target; (c) repetitively combining the primer with melted target plan, incubating the mixture with nucleotides and a DNA polymerase with
                                                                                                                                                                                                                                                                  (BASE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                   CDS
                                                                                                                            Claim
                                                                                                                                                 New opt. multimerised DNA sequences encoding spider silk proconts, both repetitive and non-repetitive sequences, useful making high strength films, fibres, woven articles etc.
                                                                                                                                                                                                                                          Basel
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                                                                                                                                                                                                                                                                                                                                                                                  WO9708315-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           High
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           proofreading activity to produce a
                                                                                                                                                                                                                                                                                                       22-AUG-1995;
                                                                                                                                                                                                                                                                                                                                22-AUG-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                flavour; fragrance; Nephila clavipes; ss.
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DB; AAW27178.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          strength film;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           aacaaaacgagagcttcgggagcagcagaagacgctacaggagcagggtgagaggctgc
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGCAGATTGAGCTTCTACTCCAGAGCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACA
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                                                                                                                                                                                                                                          RM,
                                                                                                                         14; Fig 1; 57pp; English.
target and
                                                                                                                                                                                                                                                                  BASEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              body armour;
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40..1980
/*tag= a
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                                                                                                                                                                                                                                                                                                                                                                                                          /product= Silk_protein
is at least 2 kb long. The present sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          fibre; woven article; parac
ur; heavy metal; biological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2004
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           DNA fragment which is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          parachutes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            weapon;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sails;
; chemical;
           complementary
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04-FEB-2000; 26-MAY-2000; 30-JUN-2000;

2000US-0180312. 2000US-0207456. 2000US-0608408.

30-JAN-2001;

2001WO-US00669

WO200157277-A2

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RESULT 16
ABA58819/C
ID ABA588
XX ABA588
XX O1-FEB
XX Human
XX Human;
XX Human;
XX Homo s
XX Hom
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1379
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ensures isolation of stable clones.
                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABA58819;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABA58819 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   represents a 2 Kb DNA sequence which encodes the spider silk protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gaggattaggtggacaaggtgctggacaaggagctggagcagccgctgca 1428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gtgctggacgaggtggacaaggtgcaggtgcagcagcagcagctggaggtgctggac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGCAAGATGA - - AGACCATGGAGCAGATTGAGCTTCTACTCCAGAGCCAGCTCCCTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cagctggaggtgccggacaaggaggactaggtggacaaggtgctggacaaggagctggag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGCAGCAGGCCTTGGGCAAAGGCCGAGATGCTGTGCTCCACACTGAAAAAAGCAGATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTGACAAGGAAATCATGAGCCTGAAAAAGAAGCTAACGATGCTGCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gaggattaggtggacaaggtgcaggtagcagcagcagcagctggaggtgctggacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TACTCTGAATTGGATCAGGCCAAGTTAGAACTGAAGTCAGCCCAGAAGGACTTACAGAGT 879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gtggacaaggtgccggacaaggaggctatggaggacttggaagccaaggttctggtcgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGGTGGCTGACAAGCTGAGGAAGGATTTGTTTTCCTCCAGAAGCAAGTTGCAGACAGTC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TACTGTGTGTCTCTCAAGAAAGAGTACGAGAATCTAAAAGAGGCACGGAAGGCCTCAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   aaggaggatatggaggtcttggaagccaaggtgcaggacgaggtggattaggtggacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cagccgctgcagcagctggtggtgccggacaaggaggatatggaggtcttggaaaccaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TACTTAGAGCAGCAGGATGAGACCAAACAAGCACAAGAGGAGG-CGGGCCGGCTCAG
                                                                                                                                                                                                                                                                                                                                                                                               foetal liver single exon nucleic acid probe
                                                                                                                                                                                                                                                                                                                                             foetal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2004 BP; 481 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2.48;
                                                                                                                                                                                                                                                                                                                                          gene
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                                                                                                                                                                                                                                                                                                                                          expression;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                791 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    47.2;
No. 0
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0.025;
^s 248;
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                                                                                                                                                                                                                                                                                                                                             exon
                                                                                                                                                                                                                                                                                                                                                                                                     #7124.
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                                                                                                                                                                                                                                                                                                                                             nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    929
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ONA, chemicals,
                                                                                                                                                                                                                                                                                                                                             acid
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••
                                                                                                                                                                                                                                                                                                                                          probe;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1198
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Best Local Sir
Matches 100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             03-AUG-2000;
21-SEP-2000;
27-SEP-2000;
04-OCT-2000;
 04-FEB-2000; 2000US-0180312
                                                                                                                   Human; gene expression; heart; microarray; vascular system;
cardiovascular disease; hypertension; cardiac arrhythmia;
                                                                                                                                                                                                                737/c
ABA27737 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Note: The sequence data for this patent did not form part of printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to a single exon nucleic acid probe for measuring human gene expression in a sample derived from human foetal liver. The single exon nucleic acid probes may be used for predicting, measuring and displaying gene expression in samples derived from human
                     30-JAN-2001; 2001WO-US00666
                                           09-AUG-2001
                                                                                                         congenital
                                                                                                                                                                         23-JAN-2002
                                                                                                                                                                                             ABA27737;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 475 BP; 38 A; 198 C; 45 G; 194 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (MOLE-)
                                                                                                                                                                                                                                                                      184
                                                                                                                                                                                                                                                                                            682
                                                                                                                                                                                                                                                                                                                                     622
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                                                                                                                                                                                                                                                                                            GTGGAACAG
                                                                                                                                                                                                                                                                                                                            CAGAGCCAGCTCCCTGAGGTGGAGGAGAGTGATCCGAGACATGGGTGTGGGACAGTCAGCG
                                                                                                                                                                                                                                                                                                                                                                    GAGGAGGCGGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGCTAGTGAGCTTCTACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ŝ
                                                                                                                                                                                                                                                                                                                liver. The present sequence is a single exon nucleic acid of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               genome-derived single exon nucleic acid prints gene expression in human fetal liver
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1; SEQ ID NO 7124; 639pp + sequence listing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hanzel DK,
                                                                                                          heart disease;
                                                                                                                                                   for
                                                                                                                                                                                                                                                                                                                                                                                                                                          2.3%;
ilarity 52.9%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2000US-0632366.
2000US-0234687.
2000US-0236359.
2000US-0024263.
                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                            690
                                                                                                                                                   gene
                                                                                                                                                                                                                  DNA;
                                                                                                                                                   expression analysis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chen W,
                                                                                                                                                                                                                  475
                                                                                                                                                                                                                  ВP
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                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 46.6; DB Pred. No. 0.018; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rank
                                                                                                                                                   in human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         acid probes
                                                                                                                                                                                                                                                                                                                                                                                                                                                               22;
                                                                                                                                                                                                                                                                                                                                                                                                                                            ; 68
                                                                                                                                                   heart cell sample
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 475;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              format directly
                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
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                                                                                                                                                                                                                                                                                                                                                                                                                       561
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Human 05-NOV-2001

brain expressed single

exon

probe

SEQ

Ħ

NO:

(first entry)

Human; brain expressed exon; gene expressi microarray; Alzheimer's disease; multiple

exon; gene expression analysis;

sclerosis; schizophrenia;

cancer;

WO200157275-A2 Homo sapiens 밁 Q Ъ Ş рЬ Qy В Ş

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RESULT 18
AAK06973/c
                                                                                                                                                                                                                                                                                                                                                                             Matches
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Best Local Similarity
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30-JUN-2000;
03-AUG-2000;
21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      measuring human gene expression in a sample derived from human hear present sequence is one such probe. The probes may be used for predicting, measuring and displaying gene expression in samples deriftom the human heart via microarrays. By measuring gene expression, probes are useful for predicting, diagnosing, grading, staging, monitoring and prognosing diseases of the human heart and vascular e.g. cardiovascular disease, hypertension, cardiac arrhythmias and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Single
hearts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
AAK06973;
                           AAK06973 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          congenital heart disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Penn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-OCT-2000;
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                                                                                                                184
                                                                                                                                                                                                              622
                                                                                                                                                                                                                                                                                                                                           502 ACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAA 561
                                                                                                                                             682 GTGGAACAG 690
                                                                                                                                                                               244
                                                                                                                                                                                                                                               304
                                                                                                                                                                                                                                                                               562
                                                                                                                                                                                                                                                                                                              CAGAGCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCG
                                                                                                                                                                                                                                                                             GAGGAGGCCGGCCCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTC 621
                                                                                                               GAGGAGGAG
                                                                                                                                                                               SG,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         exon nucleic acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                            475 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hanzel
                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          invention relates to single exon nucleic acid probes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000US-0207456.
2000US-0608408.
2000US-0632366.
2000US-0234687.
2000US-02346359.
2000US-0236359.
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                                DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6203;
                                                                                                                                                                                                                                                                                                                                                                                            2.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           probes
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Pred. No. 0.01:
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            45 G;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             194 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           analyzing gene expression
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                                                                                                                                                                                                                                                                                                                                                                                              .018;
                                                                                                                                                                                                                                                                                                                                                                                                            DB
                                                                                                                                                                                                                                                                                                                                                                               ; 68
                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           from human heart. The
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Best Local S
Matches 100
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27-SEP-2000;
04-OCT-2000;
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26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention provides a number of single exon nucleic acid probes which are derived from genomic sequences expressed in the human brain. They can be used to measure gene expression in brain cell samples, which may enable the diagnosis and improved treatment of nervous system diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia, epilepsy and cancers. The present sequence is one of the probes of the
                                                                                                                                                        Human; bone
microarray;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 475
                                                         WO200157276-A2
                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                          06-NOV-2001
                                                                                                                                                                                                                                                                                                                                         AAK32709;
                                                                                                                                                                                                                                                                                                                                                                                           AAK32709 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-JAN-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       184
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAGGAGGAG 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGAGCCAGCTCCCTGAGGTGGAGAGAGTGATCCGAGACATGGGTGTGGGACAGTCAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGGAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGGAGGCGGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACCACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SG,
                                                                                                                                                                                                                                     bone marrow
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ
                                                                                                                                                           cancer;
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2000US-0207456.
2000US-0608408.
2000US-0632366.
2000US-0234687.
2000US-0234687.
2000US-0236359.
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                                                                                                                                                                                                                                                                                                                                                                                           DNA;
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                                                                                                                                                              leukaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      198 C;
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                                                                                                                                                        exon; gene expression
a; lymphoma; myeloma; s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 46.6;
Pred. No. 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      194 T;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   analyzing
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; 68
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                                                                                                                                                                                                                                  SEQ
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                                                                                                                                                                                                                                     ID NO:
                                                                                                                                                                                analysis; probe
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RESULT 20
AAI38524/c
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XX AAI385
AC AAI385
AC AAI385
AC Probe
DF 17-OCT
XX
Probe
CX
DF Probe
XX
Probe;
KW Probe;
KW Probe;
KW Geneti
XX
GS Homo s
XX
PN WO2001
AX
PF 30-JAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
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                                                       09-AUG-2001
                                                                                                                                                                                                        genetic
                                                                                                                                                                                                                                  Probe;
                                                                                                                                                                                                                                                                                                                                 17-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                      AAI38524;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (MOLE-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   244
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04-FEB-2000; 2000US-0180312.
26-MAY-2000; 2000US-0207456.
30-JUN-2000; 2000US-0608408.
03-AUG-2000; 2000US-0632366.
21-SEP-2000; 2000US-0234687.
27-SEP-2000; 2000US-0236359.
04-OCT-2000; 2000GB-0024263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               probes which are derived from genomic sequences expressed in the human bone marrow. They can be used to measure gene expression in bone marrow samples, which may enable the improved diagnosis and treatment of cancer such as lymphoma, leukaemia and myeloma. The present sequence is one of the invention.
30-JAN-2001; 2001WO-US00663.
                                                WO200157272-A2
                                                                                                                                    Probe #7210 used
                                                                                                                                                                                                            AAI38524 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 4; SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human genome-derived single exon nucleic acid analyzing gene expression in human bone marrov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention provides a number of single exon nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                           GAGGAGGAG
                                                                                                                                                                                                                                                                                                                                                                                         GAGGAGGCGGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                          ACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAA 561
                                                                                                                                                                                                                                                                                                  GTGGAACAG
                                                                                                                                                                                                                                                                                                                          CAGAGCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                           2001-488900/53.
                                                                                                                                                                                                                                                                                                                                                                           microarray;
c disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULAR DYNAMICS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP;
                                                                                                                                                            (first entry)
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                                                                                                                                                                                                                                                                                                   690
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                                                                                                                                   to measure gene expression in human placenta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          38
                                                                                                   SS
                                                                                                                                                                                                               DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2.3%;
                                                                                                          human; placenta; antenatal diagnosis;
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Pred. No. 0.01
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No. 0.
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                                                                                                                                   sample
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cancers
one of
                                                                                                                                                                                                                                                                                                                           185
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RESULT 21
ABA71159;
ID ABA71159;
XX
AC ABA71159;
XX
DT 01-FEB-2002 (first
XX
DE Human foetal liver;
XX
DE Human; foetal liver;
XX
DE Homo sapiens.
XX
PN WO200157277-A2.
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-XX
PR 04-FEB-2000; 2000US-PR 26-MAY-2000; 2000US-
                                                                                                                                                                                                                                           Q
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Best Local S
Matches 100
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26-MAY-2000; 2000US-0207456.
30-JUN-2000; 2000US-0608408.
03-AUG-2000; 2000US-0632366.
21-SEP-2000; 2000US-0234687.
27-SEP-2000; 2000US-0236559.
04-OCT-2000; 2000GB-0024263.
                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention relates to single exon nucleic acid probes The present sequence is one such probe. The probes are useful for producing a microarray for predicting, measuring and displaying expression in samples derived from human placenta. The probes are for antenatal diagnosis of human genetic disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 475 BP; 38 A; 198 C; 45 G; 194 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        analyzing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MOLE-)
                                                                                                                                                                                                                             184
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                                                                                                                                                                                                                                                                                                 304
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                                                                                                                                                                                                                                                                                                                                            ACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGCAGGATGAGACCAAAGCACAA
                                                                                                                                                                                                                             GAGGAGGAG 176
                                                                                                                                                                                                                                             GTGGAACAG
                                                                                                                                                                                                                                                              CAGAGCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCG
                                                                                                                                                                                                                                                                                                GAGGAGGCGGGCCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2001-488897/53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        genome-derived single exon nu
zing gene expression in human
                                                                                                           foetal liver;
                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULAR DYNAMICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hanzel DK,
  ; 2000US-0180312.
; 2000US-0207456.
; 2000US-0608408.
                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                      2001WO-US00669
                                                                                                                             liver single
                                                                                                                                              (first
                                                                                                                                                                                                                                             690
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                                                                                                                                                                                  DNA;
                                                                                                                                             entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7210;
                                                                                                                                                                                                                                                                                                                                                                              2.3%;
                                                                                                           gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chen
                                                                                                                                                                                  511
                                                                                                           expression;
                                                                                                                             exon
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                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                      Score 46.6; DB Pred. No. 0.018; 0; Mismatches
                                                                                                                             nucleic acid probe #19464.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rank
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         nucleic acid
an placenta -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      English.
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                                                                                                           single
                                                                                                                                                                                                                                                                                                                                                                                      22;
                                                                                                           exon
                                                                                                                                                                                                                                                                                                                                                                       ; 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               probes
                                                                                                           nucleic
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                                                                                                                                                                                                                                                                                                                                                                                       Length 475;
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                                                                                                                                                                                                                                                                                                                                                                                                                                          isplaying gene
probes are useful
                                                                                                           acid
                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  for
                                                                                                          probe;
                                                                                                                                                                                                                                                                                                                                                                      Gaps
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Matches 100;
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Best Local :
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Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format direction wipo at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to a single exon nucleic acid probe for measuring human gene expression in a sample derived from human foetal liver. The single exon nucleic acid probes may be used for predicting, measuring and displaying gene expression in samples derived from human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-AUG-2000; 2000US-0632366.
21-SEP-2000; 2000US-0234687.
27-SEP-2000; 2000US-0236359.
04-OCT-2000; 2000GB-0024263.
04-FEB-2000; 2000US-0180312
                                                         09-AUG-2001.
                                                                                                                                               congenital heart
                                                                                                                                                              Human; gene expression; cardiovascular disease;
                                                                                                                                                                                                           Probe #15963
                                                                                                                                                                                                                                                                                              ABA37497 standard;
                           30-JAN-2001; 2001WO-US00666
                                                                                      WO200157274-A2
                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                       23-JAN-2002
                                                                                                                                                                                                                                                                     ABA37497;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 511 BP; 19 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              analyzing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  502 ACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGGATGAGATGAGACCAAACCAAGCACAA 561
                                                                                                                                                                                                                                                                                                                                                                                                    682 GTGGAACAG
                                                                                                                                                                                                                                                                                                                                                                          GAGGAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGAGCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGGAGGCGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                   2001-483447/52.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4; SEQ ID NO 19464; 639pp + sequence listing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             genome-derived single exon nucleic acid probes useful zing gene expression in human fetal liver -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULAR DYNAMICS
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                                                                                                                                                                                                                                                                                                                                                                          79
                                                                                                                                                  disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DK,
                                                                                                                                                                                                         gene expression analysis
                                                                                                                                                                                                                                                                                                 DNA;
                                                                                                                                                                                                                                       entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      231 C;
                                                                                                                                                                                                                                                                                                 511
                                                                                                                                                              hypertension;
                                                                                                                                                             heart; microarray; vascular hypertension; cardiac arrhyt
                                                                                                                                                  SS
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                                                                                                                                                                                                                                                                                                 ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 46.6; DI
Pred. No. 0.019
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rank
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           46.6;
No. 0.
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                                                                                                                                                                                                         in human heart cell sample.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               89;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 format directly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            511;
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RESULT 23
AAK19455/C
ID AAK194
XX AAK194
AC AAK194
XX O5-NOV
DT 05-NOV
DT U5-NOV
DT U5-NOV
DX Human
XX Microa
KW Human;
KW microa
KW epilep
XX epilep
XX SY Homo s
XX Y
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Best Local Similarity
Matches 100; Conserv
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30-JUN-2000;
03-AUG-2000;
21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   measuring human gene expression in a sample derived from human heart. present sequence is one such probe. The probes may be used for predicting, measuring and displaying gene expression in samples derive from the human heart via microarrays. By measuring gene expression, the probes are useful for predicting, diagnosing, grading, staging, monitoring and prognosing diseases of the human heart and vascular system. Cardiovascular disease, hypertension, cardiac arrhythmias and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Single
hearts
                                                         microarray; Alzheimer's disease;
epilepsy; cancer; ss.
                                                                Human; brain expressed exon; gene expression analysis; probe; microarray; Alzheimer's disease; multiple sclerosis; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Note: The sequence data for this patent did not form specification, but was obtained in electronic format
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Penn
                                                                                                                               05-NOV-2001
                                                                                                                                                                            AAK19455 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             congenital heart disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-OCT-2000;
                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (MOLE-)
                                                                                                                                                                                                                                                           682
                                                                                                                                                                                                                                                                                                                                 207
                                                                                                                                                                                                                                                                                                                                                       562
                                                                                                                                                                                                                                                                                                                                                                                                     502
                                                                                                                                                                                                                                                                                  147
                                                                                                                                                                                                                                                                                                                                                                              267
                                                                                                                                                                                                                                     87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                           ACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGCAGGATGAGACCAAACAAGCACAA 561
                                                                                                                                                                                                                                                           GTGGAACAG 690
                                                                                                                                                                                                                                                                                                                                                  GAGGAGGCGGGCCCAGGAGCCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTC
                                                                                                                                                                                                                                     GAGGAGGAG
                                                                                                                                                                                                                                                                                 CAGAGCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCG
                                                                                                                                                                                                                                                                                                                              4.
                                                                                                     brain expressed single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         exon nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000US-0207456.

2000US-0608408.

2000US-0632366.

2000US-0234687.

2000US-0234687.

2000US-0236359.

2000GB-0024263.
                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     вP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ij
                                                                                                                                                                                                                                     79
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19
                                                                                                                                                                            DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Α.
                                                                                                                            entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                      2.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   231 C;
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                                                                                                                                                                                                                                                                                                                                                                                                                         Score 46.6; Di
Pred. No. 0.01:
0; Mismatches
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                                                                                                      exon
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for analyzing gene expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       single exon nucleic acid probes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               English.
                                                                                                     probe SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                       .019;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB
                                                                                                      ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                           ; 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                       19446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    part of the printed directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                 511;
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                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     derived
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RESULT 24
AAK45444/C
ID AAK454
XX
AC AAK454
XX
DT 06-NOV
DT 06-NOV
XX
EN Human
XX
Human:
XX
OS Homo:
XX
PN WO2001
XX
PN WO2001
XX
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                                                                                                                                                                                                                                                              Вþ
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                                                                                                                                                                                                                                                                                                                                                                      δÃ
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Best Local
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26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
21-SEP-2000;
27-SEP-2000;
04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 probes which are derived from genomic sequences expressed in the human brain. They can be used to measure gene expression in brain cell samples, which may enable the diagnosis and improved treatment of nervous system diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia, epilepsy and cancers. The present sequence is one of the probes of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Single
brains
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Penn
                                                               microarray;
                                                                            Human;
                                                                                                                    06-NOV-2001
                                                                                                                                                              AAK45444 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-JAN-2001;
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                                                                                                                                                                                                                                                               147
                                                                                                                                                                                                                                                                                                                                                                502 ACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAA 561
                                                                                                                                                                                                                                        682 GTGGAACAG
                                                                                                                                                                                                                                                                                                          207
                                                                                                                                                                                                                                                                                                                                                                                             Match 2.3%;
Local Similarity 52.9%;
nes 100; Conservative
                                                                                                                                                                                                                     87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       present invention provides a number of single exon nucleic acid
                                                                                                                                                                                                                                                                                                                                                   GAGGAGGAG
                                                                                                                                                                                                                                                               CAGAGCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCG
                                                                                                                                                                                                                                                                                                         GAGGAGGCGGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2001-483446/52
                                                                                              bone marrow expressed single exon
                                                                         bone marrow expressed exon; gene expression analysis; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULAR DYNAMICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                   511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ
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2000US-0632366.
2000US-0234687.
2000US-0236359.
2000US-024263.
                                                                cancer;
                                                                                                                    (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000US-0180312
2000US-0207456
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                                                                leukaemia;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   231 C;
                                                                                                                                                                 511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            probes
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INC
                                                                                                                                                                                                                                                                                                                                                                                             Score 46.6; DI
Pred. No. 0.019
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           650pp +
                                                                                                                                                                                                                                                                                                                                                                                                                                                   26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rank
                                                                Lymphoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           for
                                                                                                                                                                                                                                                                                                                                                                                                                                                   <u>ი</u>
                                                                                                                                                                                                                                                                                                                                                                                                       . No. 0.019;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          analyzing gene expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                               probe SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   T; 0 other;
                                                                myeloma;
                                                                                                                                                                                                                                                                                                                                                                                                                 22;
                                                                                                                                                                                                                                                                                                                                                                                              ; 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Listing;
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                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             English
                                                                                                                                                                                                                                                                                                                                                                                                                   511;
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88 681

WO200157276-A2

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RESULT 25
AAIS1389/C
ID AAIS13
XX
AAIS13
AC AAIS13
XX
Probe
DE Probe
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Best Local S
Matches 100
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26 MAY 2000;
30 JUN 2000;
03 AUG 2000;
21 SEP 2000;
27 SEP 2000;
04 OCT 2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           probes which are derived from genomic sequences expressed in the human bone marrow. They can be used to measure gene expression in bone marrow samples, which may enable the improved diagnosis and treatment of cancers such as lymphoma, leukaemia and myeloma. The present sequence is one of the invention.
                                                                                                                                                                                                                                                                                                             17-OCT-2001
       30-JAN-2001; 2001WO-US00663
                                                       09-AUG-2001
                                                                                                   WO200157272-A2
                                                                                                                                                                                            genetic
                                                                                                                                                                                                                  Probe; microarray; human; placenta; antenatal diagnosis;
                                                                                                                                                                                                                                                                  Probe #20075
                                                                                                                                                                                                                                                                                                                                                                                                         AAI51389 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 511
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (MOLE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           562
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAGGAGGAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGGAGGCGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2001-488900/53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100;
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zing gene expression in human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4
                                                                                                                                                                                              disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULAR DYNAMICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000US-0180312.
2000US-0207456.
2000US-0608408.
2000US-0632368.
2000US-0234687.
2000US-02346359.
2000US-0236359.
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                                                                                                                                                                                                                                                               used
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                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2001WO-US00668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           79
                                                                                                                                                                                              SS
                                                                                                                                                                                                                                                           to measure gene expression in human placenta sample
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            provides a number of single exon nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20001; 658pp + Sequence Listing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  231 C;
                                                                                                                                                                                                                                                                                                                                                                                                         511
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                                                                                                                                                                                                                                                                                                                                                                                                         ВP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26 G;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 22;
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RESULT 2
AADOGTO
XX AADOG
XX AADOC
XX AADOC
XX AADOC
XX Huma
DE Huma
XX Huma
XX Huma
XX Huma
XX FH KW C
XX ACU
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26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
21-SEP-2000;
27-SEP-2000;
04-OCT-2000;
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                                                                                                                                                                                            Homo
                                                                                                                                                                                                                                     acute
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The present invention relates to single exon nucleic acid probes the present sequence is one such probe. The probes are useful for producing a microarray for predicting, measuring and displaying get expression in samples derived from human placenta. The probes are for antenatal diagnosis of human genetic disorders.
                                                                                                                                                             Human; haematopoietic lineage switch; HLS-5; tumour suppressor;
ring finger B-box coiled-coil; RBCC; transcriptional regulator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 511 BP; 19 A; 231 C; 26 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACACTGAAAAAGCAGATGAAGTACTTAGAGCAGCAGCAGGATGAGACCAAACAAGCACAA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              genome-derived single exon nucleic acid
zing gene expression in human placenta -
                                                                                                                                                                                                                haematopoietic lineage switch (HLS)-5
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2000US-0207456.
2000US-068408.
2000US-0632366.
2000US-0234687.
2000US-0234687.
2000US-0236359.
2000US-024263.
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                                                                                                                                                                                                                                                    (first entry)
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                                                                                                                                          leukaemia;
/*tag= a
/product= "Human HLS-5
/note= "CDS does not ir
                                                   Location/Qualifiers
2..1516
                                                                                                                                                                                                                                                                                                                          cDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2.3%;
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Pred.
                                                                                                                                          screening; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rank DR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   46.6;
No. 0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         235 T; 0 other;
-5 protein"
include st
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.019;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim
                             Key
                                                                                               Human; haematopoietic lineage switch; HLS-5; tumour suppressor; ring finger B-box coiled-coil; RBCC; transcriptional regulator; acute myeloid leukaemia; drug screening; gene therapy; cytostat:
                                                                                                                                                            Human
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"Human HLS-5 protein"
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                                                                                                                                                                                                                                                                                                                                                                              The present invention relates to a tumour suppressor gene, termed haematopoietic lineage switch (HLS)-5 and the protein it encodes. HLS-5 is a member of ring finger B-box coiled-coil (RBCC) family of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel tumor suppressor gene, HLS-5, useful for regulating cell and treating a condition characterized by aberrant cell growth
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gcaaagacc
                                     GCCGAATCC
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                                     AAF58611 standard; cDNA; 1820
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Human RECAP polynucleotide,

SEQ

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39

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entry)

nootropic; neuroprotective; anticonvulsant; antiparkinsonian; anti-HIV; antidiabetic; immunostimulant; immunomodulator; antilinflammatory; antithyroid; immunosuppressive; nephrotropic; antigout; thyromimetic; cytostatic; antibacterial; virucide; fungicide; protozoacide; antiarteriosclerotic; Human; RECAP; receptors and associated proteins; cerebroprotective; hepatotropic; gene therapy;

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07-OCT-1999;
12-NOV-1999;
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Baughn MR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      disease, dementia, Parkinson's disease, Downs's syndrome, amyotrophic lateral sclerosis, multiple sclerosis, bacterial and viral meningitis, CJD (Creutzfeldt-Jakob disease), GSS (Gerstmann - Straussler-Scheinker syndrome); Immunological disorders, including autoimmune/inflammatory disorders such as AIDS, DiGeorge's syndrome, severe combined immunodeficiency disease (SCID), Chediak-Higashi syndrome, Cushing's disease, Addison's disease, autoimmune thyroiditis, Crohn's disease, diabetes mellitus, Good pasture's syndrome, 9out, Grave's diseases, Hashimoto's thyroiditis, Sjogren's syndrome, Werner's syndrome, viral, bacterial, fungal, parasitic, protozoal, and helminthic infections; an cell proliferation disorders such as arteriosclerosis, atherosclerosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present sequence encodes a human RECAP (receptors and associated proteins) polypeptide. RECAP polypuncleotides and polypeptides are useful in the diagnosis, treatment and prevention of neurological disorders such as stroke, Alzheimer's disease, Pick's disease, Huntington's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel receptors and associated proteins for diagnosis and treatment of neurological disorders, immunological disorders including autoimmune/inflammatory disorders and cell proliferative disorders such as cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1820 BP;
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                     GTTGCAGACAGTCTACTCTGAATTTGGATCAGGCCAAGTTAGAACTGAAGTCAGCCCAGAA
                                                                                    GAAGGCCTCAGGGGAGGTGGCTGACAAGCTGAGGAAGGATTTGTTTTCCTCCAGAAGCAA
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cattgaggagagcaaataccgacagcgccacctgaaggtggagttgaagagcttcctgga
                                                                agaggcggcagagagacaatcaaaacctggaagacaaagtgcgttccttaaagacaga
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hepatitis and cancer.
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n C, Lal P;
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Best Local Similarity Matches 132; Conserv

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RESULT 29
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                           The invention relates to isolated polynucleotide (I) and CD polypeptide (II) sequences. (I) is useful as hybridisation probes, CC polymerase chain reaction (PCR) primers, oligomers, and for chromosome CC and gene mapping, and in recombinant production of (II). The polynucleotides are also used in diagnostics as expressed sequence tags CC polynucleotides are also used in diagnostics as expressed sequence tags CC in identifying expressed genes. (I) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving CC (II). (II) is useful for generating antibodies against it, detecting or CC quantitating a polypeptide in tissue, as molecular weight markers and as CC a food supplement. (II) and its binding partners are useful in medical CC imaging of sites expressing (II). (I) and (II) are useful for treating CC disorders involving aberrant protein expression or biological activity. CC The polypeptide and polynucleotide sequences have applications in CC diagnostics, forensics, gene mapping, identification of mutations CC responsible for genetic disorders or other traits to assess biodiversity CC and to produce other types of data and products dependent on DNA and CC amino acid sequences. AAS64197-AAS94564 represent novel human CC diagnostic coding sequences of the invention.

CC The sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO CC at fig. 1. The sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO CC at fig. 2. The sequence data for this patent did not appear in the printed specification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New isolated polynucleotide and encoded polypeptides, undiagnostics, forensics, gene mapping, identification of responsible for genetic disorders or other traits and to biodiversity.
 Sequence 1824 BP;
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P-PSDB; ABG17301.
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23-AUG-2000; 2000US-0649167
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID No 17292; 103pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         medical imaging; diagnostic; genetic
270 A; 670 C;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ΥŢ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gene mapping; gene therapy;
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g;
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 other
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      useful in
of mutations
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           forensic;
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RESULT 3
AAS79695
ID AAS7
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    δÃ
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                                         The invention relates to isolated polynucleotide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The polynucleotides are also used in diagnostics as expressed sequence tags for identifying expressed genes. (I) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical imaging of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity.
                                                                                                                                                                                                                                                                                           New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess biodiversity -
                  The polypeptide and pol diagnostics, forensics,
                                                                                                                                                                                                                                                            Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAR-2000;
23-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-MAR-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; chromosome mapping; gene mapping; gene therapy; forensic;
food supplement; medical imaging; diagnostic; genetic disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA encoding
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   (HYSE-) HYSEQ INC
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DB; ABG15508.
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2000US-0649167.
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                                                                                                                                                                                                                                                       No 15499; 103pp; English.
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polynucleotide sequences have applications in ics, gene mapping, identification of mutations etic disorders or other traits to assess biodi
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RESULT 31
AAK19599/c
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Best Local S
Matches 132
                                                                                                                                                                                                                             04-FEB-2000;
26-MAY-2000;
30-JUN-2000;
30-AUG-2000;
21-SEP-2000;
27-SEP-2000;
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Note: The sequence data for this patent did not appear in the prispecification, but was obtained in electronic format directly from the specification of the prispecification of the prispecific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; brain expressed exon; gene expression analysis; probe; microarray; Alzheimer's disease; multiple sclerosis; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1290
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                                                                                                                                                           (MOLE-)
                                                                                                                                                                                                                                                                                                                                                                                                30-JAN-2001; 2001WO-US00667
                                                                                                                                                                                                                                                                                                                                                                                                                                              09-AUG-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human brain expressed single exon probe
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                                                                 2001-483446/52
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                                                                                                                                                           MOLECULAR DYNAMICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cancer;
                                                                                                               Hanzel
                                                                                                                                                                                                    2000US-0180312.
2000US-0207456.
2000US-0608408.
2000US-0632366.
2000US-0234687.
2000US-0234687.
2000US-0236359.
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                                                                                                             DK,
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Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       45;
No.
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0.12;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NO: 19590
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from WIPO
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Single exon nucleic acid brains -

probes

for analyzing gene expression

in

human

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RESULT 32
AAK45604/c
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Best Local
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WPI;
                                                                                 30-JUN-2000;
03-AUG-2000;
                                                                                                    04-FEB-2000;
26-MAY-2000;
                                                                                                                                                                                       Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   brain. They can be used to measure gene expression in brain cell samples which may enable the diagnosis and improved treatment of nervous system diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia,
                                                                                                                                30-JAN-2001;
                                                                                                                                                   09-AUG-2001
                                                                                                                                                                    WO200157276-A2
                                                                                                                                                                                                        microarray; cancer;
                                                                                                                                                                                                                  Human; bone marrow expressed exon; gene expression analysis; probe;
                                                                                                                                                                                                                                    Human bone marrow expressed single exon probe SEQ ID NO: 20161.
                                                                                                                                                                                                                                                        06-NOV-2001
                                                                                                                                                                                                                                                                           AAK45604;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          epilepsy and cancers. The present sequence is one of the probes of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The
                 Penn
                                    (MOLE-)
                                                                                                                                                                                                                                                                                            AAK45604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                probes which are derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 4;
                                                               27-SEP-2000;
                                                                         21-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           588
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                                                                                                                                                                                                                                                                                                                                                                                                                    139
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2001-488900/53
                 SG,
                                                                                                                                                                                                                                                                                                                                                                                               GTCTCTCAAGAAAGAGTACGAGAATCTAAAAGAGGCACGGAAGGCCTCAGGGGAGGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATGAAGACCATGGAGCAGATTGAGCTTCTACTCCAGAGCCAGCTCCCTGAGGTGGAGGA
                                    MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                            standard;
                 Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ
                                                     ; 2000US-0180312.
; 2000US-0207456.
; 2000US-0608408.
; 2000US-0632366.
; 2000US-0234687.
; 2000US-0234687.
; 2000US-0234683.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                2001WO-US00668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP; 3 A; 151 C; 4
                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ID NO:
                                                                                                                                                                                                                                                                                            DNA;
                                                                                                                                                                                                         leukaemia; lymphoma; myeloma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2.2%;
                 Chen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        provides a number of single exon nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19590; 650pp + Sequence Listing; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                from genomic sequences
                 ξ
                                                                                                                                                                                                                                                                                            ВP
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0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 44.4; DB 22; Pred. No. 0.054;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               G; 109
                 Rank
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              T; 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 126;
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Best Local Similarity
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                                                                                       31-MAR-2000;
23-AUG-2000;
                  P-PSDB; ABG10053
                                                                   (HYSE-) HYSEQ
                                                                                                                      30-MAR-2001;
                                                                                                                                          11-OCT-2001
                                                                                                                                                              WO200175067-A2
                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                              Human; chromosome mapping; gene mapping; gene therapy;
                                                                                                                                                                                                                                 DNA encoding novel
                                                                                                                                                                                                                                                       13-FEB-2002
                                                                                                                                                                                                                                                                                               AAS74240 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   analyzing gene expression in human bone marrow
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human genome-derived single exon nucleic acid probes useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       198
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                            2001-639362/73
                                                                                                                                                                                                     supplement; medical imaging; diagnostic; genetic
                                                                                                                                                                                                                                                                                                                                                GAAGAAGAAAAGAAGGA
                                                                                                                                                                                                                                                                                                                                                                     TGACAAGCTGAGGAAGGA
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                                                                                                                                                                                                                                                                                                                                                                                       131;
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                                                                                                                                                                                                                                                      (first entry)
                                                                                       2000US-0540217
2000US-0649167
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                                                c,
                                                                                                                                                                                                                                                                                               cDNA;
                                                                                                                                                                                                                                  human diagnostic protein #10044.
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Pred. No. 0
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                                                                                                                                                                                                     disorder;
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New isolated polynucleotide and encoded polypeptides, useful

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CC The invention relates to isolated polynucleotide (I) and CC polymerase (II) sequences. (I) is useful as hybridisation probes, CC polymerase chain reaction (PCR) primers, oligomers, and for chromosome CC and gene mapping, and in recombinant production of (II). The CC polynucleotides are also used in diagnostics as expressed sequence tags CC for identifying expressed genes. (I) is useful in gene therapy techniques CC to restore normal activity of (II) or to treat disease states involving CC (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical CC imaging of sites expressing (II). (I) and (II) are useful for treating CC disorders involving aberrant protein expression or biological activity. The polypeptide and polynucleotide sequences have applications in CC diagnostics, forensics, gene mapping, identification of mutations cresponsible for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and CC amino acid sequences. AAS64197-AAS94564 represent novel human CC diagnostic coding sequences of the invention.

CC Note: The sequence data for this patent did not appear in the printed coast first pulpo intentions obtained in electronic format directly from WIPO
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Best Local Similarity
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                               WO200175067-A2
                                                                                                                                                                                                                                       DNA encoding
                                                                                                                                                                                                                                                                                                     13-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                            AAS90715 standard; cDNA; 693
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                                                                                       Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGAGCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCG
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                                                                                                                                            supplement;
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                                                                                                                                                                              chromosome
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                                                                                                                                                                                                                                   novel human diagnostic protein #26519
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               456
                                                                                                                                               medical imaging; diagnostic;
                                                                                                                                                                           mapping;
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. 0.097;
                                                                                                                                                                           gene therapy;
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                                                                                                                                            genetic
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                                                                                                                                                  disorder;
                                                                                                                                                                              forensic;
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CC Note: The sequence data for this patent did not appear in the printed constitution, but was obtained in electronic format directly from WIPO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              P-PSDB;
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23-AUG-2000; 2000US-0649167
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to isolated polynucleotide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ocal Similarity
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                                                                                                                         GTGGAACAGCTGGCTGTGTACTGTGTCTCTCAAGAAGAGTACGAGAATCTAAAAGAG
                                                                                                                                                                                                                            CAGAGCCAGCTCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCG
                                                                                                                                                                                                                                                                                                                                                   GAGGAGGCGGGCCCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTC
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Pred. No. 0.097;
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29-DEC-1995;
29-DEC-1995;
30-JAN-1996;
30-JAN-1996;
                                                                                                                                                                                                                                                       This sequence represents a fragment of the genomic sequence containing the coding region for the mouse WRN gene (AAX83004). The corresponding human gene (AAX93001) encodes a protein related to Merner's syndrome. The products can be used for the detection and treatment of Merner's syndrome (MS), an autosomal recessive disorder with a complex phenotype.
                                                                                                                                                                                                                                                                                                                                           Isolated nucleic acid molecule encoding the WRN gene product useful for detection and treatment of Werner's syndrome, and related
                                                                                                                                                                                                                                 Sequence 51259 BP; 14533 A;
                                                                                                                                                                                                                                                                                                                 Claim 1; Fig 7; 153pp; English.
                                                                                                                                                                                                                                                                                                                                                                          WPI;
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            GGAAGGCCTCAGGGGAGGTGGCTGA
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                                                                                                                              AGGCGGGCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTCCAGA 625
                                                                                                                                                AACAGCTGGCTGTGTACTGTGTGTCTCTCAAGAAAGAGTACGAGAATCTAAAAGAGGCAC
                                                                         Mulligan
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lve disorder; p
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95US-0009409.
95US-0580539.
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96US-0594242.
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47.98;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           capable of detecting 1000 or more genes from Drosophila. The invention useful in developmental biology and in elucidating cell signalling and cell-cell interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA sequences (ABL01840-ABL16175) and the encoded proteins (ABB72072).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to an isolated nucleic acid detection reagent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1;
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11-JUL-2000; 2000US-0614150
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                                                                                                                                                                                                                                                                  463 CTGCAGCAGGCCTTGGGCAAGGCCGAGATGCTGTGCTCCACACTGAAAAAAGCAGATGAAG 522
                                                                                                                                                                                                                                                                                                                                                                                      403 CAGGTCATCATCGACACTCTGCGGGATACGCTGGAAGAACGCAATGCTACTGTGGTATCT 462
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GAGGAGATGATCCGAGACATGGGTGTGG
                                             cacagccaggagaacctgcaaacggtgtacgatcagacccagaggcagtgcagccagtat
                                                                                                                                                                                                                                                                                                                                    cagcacaccaaggctgaactgctggacaagcggaaggagaacgatcggcacgccaagtcg
                                                                                          AGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTCCAGAGCCAGCTCCCTGAGGTG
                                                                                                                                          TACTTAGAGCAGCAGGATGAGACCAAACAAGCACAAGGAGGCGGGCCGGCTCAGG
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format directly from
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                                                                                   Matches
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Best Local :
                                                                                                                                                              PCR was performed on total cellular RNA from 5 AMML patients having a pericentric inversion of chromosome-16, M4Eo subtype. Sequencing showed the inv(16) fusion to comprise a sequence from the CBFB gene, encoding a novel transcription factor, and the MYH11 gene, encoding smooth muscle myosin heavy chain. In 1 patient, nt 1-492 of the CBFB gene were fused to nt 994 of MYH11 (shown in AAQ84589; predicted as sequence in AAR66930). Probes specific for inv(16) can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   misc_feature
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1933 caggatgatatgcgtctaatgggcgtgg 1960
                                                                                                                                                                                                                                                  Claim 1; Page 34-38;
                                                                                                                                                                                                                                                                                                                                  Claxton D,
                                                                                                                                                                                                                                                                                                                                                                                                        26-JUL-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                            09-FEB-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                WO9504067-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SMMHC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AMML chromosome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-SEP-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAQ84589;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAQ84589
                                                                                                                                   Sequence 2887 BP;
                                                                                                                                                                                                                                                                                Novel
                                                                                                                                                                                                                                                                                                                                                      (UNMI ) UNIV MICHIGAN.
(TEXA ) UNIV TEXAS SYSTEM.
                                                                                                                                                                                                                                                                                                                                                                                     29-JUL-1993;
                      590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   inv(16);
   572
                                          512
                                                                                                                                                                                                                                                                    el DNA spanning the pericentric the screening of acute myeloid
                                                   1995-082178/11.
DB; AAR66930.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sapiens
gccaggccaagcaggaggtggaacataagaagaagaagctggaggcgcaggtgcaggagc
                     TGAAGACCATGGAGCAGATTGAGCTTCTACTCCAGAGCCAGCTCCCTGAGGTGGAGGAGA 649
                                        agaataagcagacgctggagaaagagaacgcagacctggccggggagctgcgggtcctgg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 acute myelomonocytic leukemia; chromosome-16; inversion;
6); CBF-beta; CBFB gene; transcription factor; myosin; MYH11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ds
                                                                                             Similarity
                                                                                                                                                       for diagnosis of AMML.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            standard;
                                                                                                                                                                                                                                                                                                                                  Collins FS,
                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                    93US-0099869
                                                                                                                                                                                                                                                                                                                                                                                                        94WO-US08530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 inv(16).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /*tag=
492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                  868 A; 702 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CDNA
                                                                                         2.2%;
                                                                                                                                                                                                                                                78pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "inv(16) breakpoint; to nt 994 of MYH11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ő
                                                                                                                                                                                                                                                                                                                                  Liu
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                                                                                  0;
                                                                                                                                                                                                                                                                                                                                 ٦,
                                                                                                     Score 44;
                                                                                          Pred. No. 0.22;
                                                                                 Mismatches
                                                                                                                                   940 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2887
                                                                                                                                                                                                                                                                                                                                  Siciliano
                                                                                                                                                                                                                                                                    inversion of chromosome leukaemia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ВP
                                                                                                                                    377
                                                                                                    DB 16;
                                                                                                                                   Τ;
                                                                                                                                                                                                                                                                                                                                  Ĭ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CBFB
                                                                                  150;
                                                                                                                                   0 other;
                                                                                                   Length 2887;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             nt 1-492
                                                                                 Indels
                                                                                                                                                                                                                                                                                16
                                                                                 0;
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Qy

403 CAGGTCATCGACACTCTGCGGGATACGCTGGAAGAACGCAATGCTACTGTGGTATCT 462

cagcacaccaaggctgaactgctggacaagcggaaggagaacgatcggcacgccaagtcg

Query Match Best Local Matches

Similarity

2.2%;

Conservative

0; Pred. Score 44;

Mismatches

NO.

DB 2

23; 140;

Length 4945;

0;

Gaps

0;

В

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RESULT 3
\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{\circ}{\times}\overset{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                                                                                                                                                                                                                                                                                                        The invention relates to an isolated nucleic acid detection reagent capable of detecting 1000 or more genes from Drosophila. The inventiuseful in developmental biology and in elucidating cell signalling cell-cell interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABL01840-ABL16175) and the encoded proteins (ABBC18737-ABB72072).
                                                                                                                                                                                        The sequence data for this patent did not form specification, but was obtained in electronic f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; SEQ ID NO 24932; 21pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      genes from Drosophila and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            P-PSDB; ABB66047.
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11-JUL-2000; 2000US-0614150
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      Sequence
                                                                                                                                   at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New isolated nucleic acid
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             4945
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      BP; 1373 A;
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                                                                                                          The invention relates to an isolated nucleic acid detection reagent capable of detecting 1000 or more genes from prosophila. The invent useful in developmental biology and in elucidating cell signalling cell-cell interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABL101676-ABL30511), expressed DNA sequences (ABL018737-ABB72072).
                                                                                                                                                                                                                                          New isolated nucleic acid genes from Drosophila and
                                                                                     The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from
                                                                                                                                                                                                            Claim 1; SEQ ID NO 25796;
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11-JUL-2000;
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29-DEC-1995;
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                                                                           This sequence represents a fragment of the genomic sequence containing the coding region for the mouse WRN gene (AAX83004). The corresponding human gene (AAX83001) encodes a protein related to Werner's syndrome. The products can be used for the detection and treatment of Werner's syndrome (WS), an autosomal recessive disorder with a complex phenotype
                                                                                                                                                                                                                                   Claim 1; Fig 7; 153pp; English.
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                                                                                                                                                                                                                                                                    В
Search completed: September 4, 2002, 14:00:32 Job time: 9036 sec
                                                                                                                                                                                                                                                                                                                      Matches 130; Conservative
                                                                                                                                                             16200 AGAAGGAGAAGAAGAAGAAGAAGAAGAA 16167
                                                                                                            572 GCCGGCTCAGGAGCAAGATGAAGACCATGGAGCAGATTGAGCTTCTACTCCAGAGCCAGC 631
                                                                                                                                                                              632 TCCCTGAGGTGGAGGAGATGATCCGAGACATGGGTGTGGGACAGTCAGCGGTGGAACAGC 691
                                                                          752 CCTCAGGGGAGGTGGCTGACAAGCTGAGGAAGGA 785
                                                                                                                            692 TGGCTGTGTGTGTGTGTCTCTCAAGAAAGAGTACGAGAATCTAAAAGAGGCACGGAAGG 751
                                                                                                                                                                                                                                                                                                                     0; Mismatches 144; Indels
                                                                                                                                                                                                                                                                                                                     0; Gaps
                                                                                                                                                                                                                                                                                                                     0;
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